# TECHNICAL REVIEW DOCUMENT For Renewal of OPERATING PERMIT 950PWE103

to be issued to:

DCP Midstream, LP.
Enterprise Compressor Station
Weld County
Source ID 1230277

Prepared by Lisa Clarke May – June 2007

## I. PURPOSE

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed operating permit proposed for this site. The original Operating Permit was issued May 1, 1999, and expired on May 1, 2004. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted May 1 and June 18, 2003, October 18, October 19, and November 22, 2004, March 31 and April 1, 2005, and June 7 and June 18, 2007, previous inspection reports, and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at http://www.cdphe.state.co.us/ap/Titlev.html.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

In addition to the changes requested by DCP Midstream in the renewal application, the Division has included changes to make the permit consistent with recently issued permits, including comments made by EPA on other Operating Permits, as well as to correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

# II. SOURCE DESCRIPTION

The Enterprise Compressor Station is classified as a natural gas compressor station on a gas transmission line as set forth under Standard Industrial Classification Code 4922. The plant uses

five (5) (which will become four during the permit term) gas-fired internal combustion engines to drive compressors to boost the inlet gas pressure from about 80 PSIG to about 1050 PSIG to facilitate movement of the gas in the pipeline. All five (5) engines have individual stacks to vent the products of combustion.

The station plant includes a triethylene glycol (TEG) dehydration unit that contacts "lean" triethylene glycol with the inlet natural gas stream to remove moisture. The "rich" glycol mixture is regenerated in a still for reuse in the process. The still vent exhaust gas is sent to a condenser to capture additional liquids, and the condenser gas exhaust is sent to a flare for additional reduction of volatile organic compounds remaining in the gas stream. The TEG dehydration system operates with a flash tank. The flash tank emissions are used as fuel for the TEG regenerator boiler.

A condensate product is generated when the inlet gas is routed through the inlet scrubber. The condensate is transferred first to a 30,000 gallon pressurized storage tank, to a stabilizer tank to remove any volatile material, and finally to four (4) 300 barrel atmospheric storage tanks. A loading system is provided for moving the liquid condensate material from the tanks into a truck for transport offsite. The vapors from the stabilizer skid and the pressurized condensate storage are routed to a vapor recovery unit and compressed back into the plant gas inlet stream.

The plant is located in rural Weld County between Keenesburg and Roggen, Colorado. The area in which the plant operates is classified as attainment for all pollutants except ozone. It is classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.16. There are no affected states within 50 miles of the plant. Rocky Mountain National Park is a Federal Class I designated area within 100 kilometers of the plant.

#### **Condensate Storage Tanks and Condensate Loading Equipment**

Revisions were made to Colorado Regulation No. 3, regarding condensate storage tanks and condensate truck loading equipment and those revisions took effect on December 30, 2002. Previously, under Regulation No. 3, certain size condensate storage tanks and condensate truck loading equipment meeting a specified throughput limit were exempt from APEN reporting and permitting requirements and were considered insignificant activities for Title V operating permit purposes. With the revisions to Colorado Regulation No. 3, only condensate storage tanks and condensate truck loading equipment at exploration and production (E & P) sites, meeting specified throughput limits are APEN exempt and insignificant activities. This facility is affected by these changes to Reg. 3 since there are four (4) 300 bbl condensate tanks (P013 and AIRS Points 063 & 064) present at the facility. Duke Energy Field Services, LP (now DCP Midstream, LP) submitted an application for a permit for these tanks on October 18, 2004.

# **MACT Applicability**

#### Case-by-Case MACT - 112(j) (40 CFR Part 63 Subpart B §§ 63.50 thru 63.56)

Under the federal Clean Air Act (the Act), EPA is charged with promulgating maximum achievable control technology (MACT) standards for major sources of hazardous air pollutants (HAPs) in various source categories by certain dates. Section 112(j) of the Act requires that permitting authorities develop a case-by-case MACT for any major sources of HAPs in source categories for which EPA failed to promulgate a MACT standard by May 15, 2002. These provisions are commonly referred to as the "MACT hammer."

Owner or operators that could reasonably determine that they are a major source of HAPs which includes one or more stationary sources included in the source category or subcategory for which the EPA failed to promulgate a MACT standard by the section 112(j) deadline were required to submit a Part 1 application to revise the operating permit by May 15, 2002. The source did submit a Part 1 application to the Division prior to May 15, 2002, indicating that the facility was a major source for HAPS. Since the EPA has signed off on final rules for all of the source categories, which were not promulgated by the deadline, the case-by-case MACT provisions in 112(j) no longer apply.

#### **HHH - Natural Gas Transmission and Storage**

This facility is not a natural gas transmission and storage facility as described in 40 CFR Part 63 Subpart HHH, "National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage". A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage source category. This facility is located upstream of the DCP Roggen Gas Processing Plant. Therefore, this facility is not subject to this MACT.

#### **HH – Oil and Natural Gas Production Facilities**

The construction permit (00WE0470) and renewal operating permit include HAP limits on the dehydrator in order to avoid applicability to the major source provisions in 40 CFR Part 63 Subpart HH, "National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities" (Oil and Natural Gas Production MACT). However, this source is still subject to the area source provisions of Subpart HH. Since Construction Permit 00WE0470 establishes federally enforceable emission limits below the applicability threshold of 1984 lbs of benzene per year. The federally enforceable limit for benzene from the TEG dehydrator at this facility is 1848.4 lbs of benzene per year. The source verified that emissions are below this level and estimates benzene emissions from the dehydrator to be approximately 400 lbs of benzene per year. Conditions for the area source requirements for Subpart HH were added to the Operating Permit (Section II, Condition 3.11).

The final rule for RICE was published in the Federal Register on June 15, 2004. The engines in the current Title V permit are 4-cycle clean burn engines. In accordance with the provisions in 40 CFR Part 63 Subpart ZZZZ § 63.6590(b)(2), existing (commenced construction or reconstruction prior to December 19, 2002) 4-stroke lean burn engines do not have to meet the requirements in 40 CFR Part 63 Subparts A and ZZZZ, except the initial notification requirements, which were submitted for this facility. The Division considers that the clean burn engines meet the definition of lean burn engines in 40 CFR Part 63 Subpart ZZZZ § 63.6675.

Source P018 (AIRS Point 070) is subject to the requirements of Subpart ZZZZ since it is a new engine constructed after December 19, 2002. This engine was manufactured in December 2006.

#### **Compliance Assurance Monitoring (CAM)**

The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold (100 tons per year). They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64 as adopted by reference into Colorado Regulation No. 3, Part C, Section XIV:

Emission Unit	Description	Emission Limit, Tons per Year		
		VOC	Single HAP	Total
			(except	HAPs
			formaldehyde)	
D2	Glycol Dehydrator Regeneration Unit	6.1	8.0	20.0

The primary purpose of the CAM program is to supplement or enhance the Operating Permit monitoring requirements as necessary to adequately demonstrate compliance. The condenser outlet temperature and flare are monitored continuously with thermocouples. The proper performance envelopes for the control device parameters being monitored are any average temperature below 140 °F for the condenser outlet temperature and any presence of flame for the flare monitor.

The CAM provisions require a source to monitor at least one indicator of performance per control device and to perform at least one parameter observation per 24 hours. DCP selected to monitor the condenser outlet temperature and the flame presence on a daily frequency. The daily measurement frequency satisfies the minimum CAM requirement.

#### **Emissions**

The following table presents the facility-wide Potential To Emit (PTE).

<u>Pollutant</u>	Potential to Emit	Actual (tpy)
	<u>(tpy)</u>	Data Year 2006
NOx	215.2	191.2

VOC (not including fugitive VOCs)	166.8	133.6
CO	197.4	191.2
HAPs	8 individual (except formaldehyde) & 20 total	15.9

The potential emissions classify this plant as a major source with respect to Prevention of Significant Deterioration (PSD) requirements. However, the permitted emissions classify this plant as a synthetic minor source with respect to Prevention of Significant Deterioration (PSD) requirements. When Construction Permit 97WE0553 was issued, the source was classified as major with respect to PSD. However, when DCP installed oxidation catalysts on all four (4) engines in October 2004, the source became a synthetic minor source with respect to PSD.

This plant is located in an area designated as attainment for all pollutants except ozone. Based on the information provided in the Title V application, this facility is categorized as a NANSR major stationary source (Potential to Emit of VOC or NOx  $\geq$  100 Tons/Year). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for VOC or NOx or a modification which is major by itself (i.e. a Potential to Emit of  $\geq$  100 TPY of either VOC or NOx) may result in the application of the NANSR review requirements.

Based on the information provided by the applicant, this source is categorized as a minor stationary source for PSD as of the issue date of this permit. Any future modification which is major by itself (Potential to Emit of  $\geq 250$  TPY (use 100 TPY if a listed source category)) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements.

The PTE shown above is based on maximum emissions from the engines (8760 hours per year operation), and permit limitations for the dehydrator, fugitive VOCs, condensate tanks, soil vent with air sparge, and condensate storage tank truck loadout. Actual pollutant emissions from the engines, fugitive VOCs, and the dehydrator are based on the most recent year of reported actual emissions to the Division.

#### **Emission Sources**

The following sources are specifically regulated under terms and conditions of the Operating Permit for this plant:

#### **Internal Combustion Engines Powering Compressors**

P003 – Caterpillar G3612SI 3300 HP

P004 – Caterpillar G3612SI 3300 HP

P005 – Caterpillar G3612SI 3300 HP

P006 - Caterpillar G3612SI 3300 HP

P018 – Caterpillar G3612 3550 HP

Trietyhlene Glycol Regeneration Unit w/ Flash Tank and Vent Flare (D-2)

Condensate Storage Tank Truck Loadout (P016)
Fugitive Emissions of Volatile Organic Compounds from Equipment Leaks (P012)
Stabilized Condensate Tanks (P013)
Soil Vent with Air Sparge (SVE-01)

The existing permit requires DCP to monitor the gas methane/ethane composition to demonstrate the gas quality was consistent. DCP requested this requirement not be included in the renewal because sufficient data had been generated to demonstrate a consistent gas quality. The change was made as requested. The permitting language was updated to make the permit consistent with the standard language currently used in the permits.

#### Accidental Release Program (112(r))

Section 112(r) of the Clean Air Act mandates a new federal focus on the prevention of chemical accidents. Sources subject to these provisions must develop and implement risk management programs that include hazard assessment, a prevention program, and an emergency response program. They must prepare and implement a Risk Management Plan (RMP) as specified in the Rule.

Based on the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

#### **Emission Factors**

From time to time published emission factors are changed based on new or improved data. A logical concern is what happens if the use of the new emission factor in a calculation results in a source being out of compliance with a permit limit. For this operating permit, the emission factors or emission factor equations included in the permit are considered to be fixed until changed by the permit. Obviously, factors dependent on the fuel sulfur content or heat content cannot be fixed and will vary with the test results. The formula for determining the emission factors is, however, fixed. It is the responsibility of the permittee to be aware of changes in the factors, and to notify the Division in writing of impacts on the permit requirements when there is a change in factors. Upon notification, the Division will work with the permittee to address the situation.

# III. <u>DISCUSSION OF MODIFICATIONS MADE</u>

#### **Source Requested Modifications**

#### • Engines – Construction Permit 97WE0553

DCP requested that the Division remove one of the engines from the permit (P007). This engine has been removed from the station. DCP also requested incorporation of air pollution control devices, oxidation catalysts, to engines P003, P004, P005, and P006.

1. Applicable Requirements – The conditions of the construction permit were already incorporated into the Operating Permit. The Title V application identifies these engines are 4-cycle, lean burn engines equipped with oxidation catalysts for emission control. These engines could be subject to the Maximum Achievable Control Technology (MACT) of 40 CFR 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal

Combustion Engines" (RICE MACT). However, existing (commenced construction or reconstruction prior to December 19, 2002) 4-stroke lean burn engines do not have to meet the requirements in 40 CFR Part 63 Subparts A and ZZZZ, except the initial notification requirements. The initial notification requirements have been submitted for this facility. The Division considers that the clean burn engines meet the definition of lean burn engines in 40 CFR Part 63 Subpart ZZZZ § 63.6675.

- 2. Emission Factors The emission factors for NO<sub>x</sub>, VOC, and CO are reported in lb/MMBtu based on the engine design data and fuel heating value. The renewal Operating Permit requires the source to conduct initial compliance testing on the engines within 180 days of permit issuance for formaldehyde, carbon monoxide, nitrogen oxides, and oxygen (Section II, permit condition 10)
- 3. Monitoring Plan The operating permit has established a procedure for the calculation of emissions based on fuel consumption and a fuel based emission factor. The fuel consumption of each engine is determined by allocating fuel use to each of the engines based on monthly hours of operation and total engine fuel use.

The Division's current (6/1/2006) portable monitoring language has been included in the permit. This requires the source to measure NO<sub>x</sub> and CO emissions quarterly.

The Btu content of the natural gas fuel shall be measured semi-annually (twice per year) using appropriate methods. The oxidation catalyst on each engine shall have inlet and outlet temperature recorded on a monthly basis.

## • New engine – Caterpillar G3612 3550 HP

DCP has requested that the Division add this engine to the permit (P018). DCP also requested incorporation of an air pollution control device, an oxidation catalyst, to this engine and that MACT ZZZZ requirements be imposed on this engine and outlined in the permit. The Division determined that this engine is also subject to CAM requirements, which are outlined in the permit.

- Applicable Requirements The Title V application identifies this engine as a 4-cycle, lean burn engine equipped with an oxidation catalyst for emission control.
   This engine is subject to the Maximum Achievable Control Technology (MACT) of 40 CFR 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" (RICE MACT).
- 2. Emission Factors The emission factors for NO<sub>x</sub>, VOC, and CO are reported in lb/MMBtu based on the engine design data and fuel heating value. The renewal Operating Permit requires the source to conduct initial compliance testing on the engines within 180 days of permit issuance for formaldehyde, carbon monoxide, nitrogen oxides, and oxygen (Section II, permit condition 10)

4. Monitoring Plan - The operating permit has established a procedure for the calculation of emissions based on fuel consumption and a fuel based emission factor. The fuel consumption of each engine is determined by allocating fuel use to each of the engines based on monthly hours of operation and total engine fuel use.

The Division's current (6/1/2006) portable monitoring language has been included in the permit. This requires the source to measure NO<sub>x</sub> and CO emissions quarterly.

The Btu content of the natural gas fuel shall be measured semi-annually (twice per year) using appropriate methods. The oxidation catalyst on each engine shall have inlet and outlet temperature recorded on a monthly basis.

Appropriate monitoring and performance testing of the CEMS or pressure drop and temperature (using a CPMS) shall be conducted on a semi-annual basis and pressure drop recorded monthly.

- 5. CAM Plan Review This engine is equipped with an oxidation catalyst for control of VOC and CO emissions. The potential to emit for VOCs of the engine, without controls, exceeds major source levels and the engine is subject to an annual limit on VOC emissions. A CAM plan was not submitted for the engine. However, this engine is also subject to the RICE MACT ZZZZ. The CAM plan indicator ranges will reference the operating limitations of the RICE MACT.
- Glycol dehydration unit Construction permit 00WE0470 DCP has submitted a CAM plan for the triethylene glycol dehydrator at this facility.
  - 1. Applicable Requirements DCP employs a condenser and flare to reduce glycol dehydrator emissions, and flash emissions are vented back into the process. Construction Permit 00WE0470 was drafted to establish federally enforceable emission limits reflecting the level of emissions from the condenser and flare. The federally enforceable emission limits allow this potential Subpart HH affected source to be classified as a synthetic minor source exempt for the Subpart HH major source provisions. However, this source is still subject to the area source provisions of Subpart HH since Construction Permit 00WE0470 establishes federally enforceable emission limits below 1984 lbs of benzene per year. The federally enforceable limit for benzene from the TEG dehydrator at this facility is 1848.4 lbs of benzene per year. The source verified that emissions are below this level and estimates benzene emissions from the dehydrator to be approximately 400 lbs of benzene per year. Conditions for the area source requirements for Subpart HH were added to the Operating Permit (Section II, Condition 3.11).
  - 2. Emission Factors Triethylene glycol is contacted with the natural gas stream to reduce the moisture in the natural gas to a desired level. This glycol-water mixture is heated in the still vent portion of the unit to remove the collected moisture from the glycol. Volatile organic compounds and hazardous air pollutants entrained in the water are also released. The emissions from this

process may be estimated using the Gas Research Institute's GLYCalc Model. The Model algorithm estimates the volatile organic compound and hazardous air pollutant emissions based on inputs of the glycol recirculation rate, cubic feet of gas processed, inlet temperature and pressure of the processed wet gas, and percentage breakdown by volume of constituents in the natural gas. The "worst-case" emissions were estimated using GRI GLYCalc 4.0 and submitted to the Division (dated January 1, 2006) during the construction permitting process.

- 3. Monitoring Plan The Gas Research Institute's manual for the GLYCalc Model defines the wet gas (inlet) temperature, glycol recirculation rate, and gas BTEX content as the three critical inputs to the Model for triethylene glycol units. Changes to the gas flow rate and inlet pressure do not radically affect emissions from glycol dehydrators. The Division is requiring weekly monitoring of the following parameters, which are used in GLYCalc: glycol circulation rate, inlet gas temperature & pressure, and flash tank temperature & pressure. Condenser outlet temperature will be monitored on a continuous basis, and the highest daily temperatures will be used to determine an average. Samples of the inlet gas shall be collected and analyzed annually. Frequency of analysis will be changed if the BTEX content is shown to be inconsistent. The natural gas processing rate shall be recorded monthly. DCP has requested that the Division require monthly modeling using GLYCalc, instead of the parameter monitoring approach that most other sources prefer. The Division will allow this approach, with the extra parameters that are required by Subpart HH.
- 4. CAM Plan Review CAM is required since the permit contains VOC and HAP limits and pre-control emissions of VOC exceed 100 TPY and HAPs exceed 25 TPY (according to the worst-case emissions from GRI GLYCalc runs). DCP has submitted a proposed CAM plan.

Reduction of the emissions from the glycol dehydrator is required to meet permit limitations and these emissions are reduced with a condenser process and additional flare. The condenser outlet temperature indicates the level of performance occurring in the condenser because the outlet temperature is the essential value in using GLYCalc to estimate emissions from the condenser controlled glycol dehydrator. To achieve acceptable performance from the condenser, the outlet temperature must be kept below a certain level (i.e., a maximum temperature). If the outlet temperature is not in the proper range, the unit is assumed to be malfunctioning and needs to be repaired.

The Division feels that the condenser outlet temperature is an appropriate indicator for the condenser. An excursion would be a condenser outlet temperature in excess of 140° F. This is the temperature that was used in the worst-case GRI GLYCalc run submitted by the source. The source should monitor this indicator at least once per day. DCP requested that the Division allow them to take an average daily temperature reading to show compliance with the requirement for the condenser outlet to remain below 140° F. The Division will allow this averaging as the source has submitted a specific averaging approach, which will be included in the CAM plan.

Presence of a flame is the second indicator that will be used in the CAM plan. The Division finds this indicator appropriate and acceptable.

#### • Condensate truck loadout – Construction permit 97WE0553

DCP requested that the condensate truck loadout be increased based on actual throughput, which has been incorporated into the Operating Permit.

- Applicable Requirements Compliance limit of 10.9 tons of volatile organic compounds per year and 4 million gallons of condensate to be loaded per year.
   The loadout emissions report only the NonMethane, NonEthane VOC (NMEVOC) as reported in the most recent analysis of the product. The Division requires a copy of the analysis to be kept on-site.
- 2. Emission Factors The truck loadout emissions are calculated using the appropriate equation and emission factors from AP-42.
- 3. Monitoring Plan The emissions of each pollutant and the gallons of condensate loaded on trucks shall be calculated by the end of the subsequent calendar month. A twelve (12) month rolling total of emissions shall be maintained to verify compliance with the long-term emission limitation. By the end of the new calendar month, a total shall be calculated for the previous 12 calendar months, and compliance determined and recorded. All calculations and compliance determinations shall be made available for Division review upon request.

#### Stabilized Condensate Tanks

Pursuant to Regulation No. 3, Part A, Section II.D.1.eeee, DCP submitted APENs and construction permit application forms for four stabilized condensate tanks at this facility. These four tanks have been incorporated into the Operating Permit.

- 1. Applicable Requirements Compliance limit of 4.3 tons of volatile organic compounds per year. These tanks would be subject to Regulation No. 7, except that DCP has actual uncontrolled VOC emissions of atmospheric storage tanks (not at gas plants) in the 8-hour Ozone Control Area of less than 30 tons of VOC per year (for 2004 2006 and currently for 2007). Therefore, these tanks are not subject to the condensate tank control requirement for Regulation No. 7.
- 2. Emission Factors Compliance factor of 2.25 lb per 1000 gallons of condensate, determined from site specific sampling and HYSIS. The following equation is used to calculate emissions:

Tons per month = gallons per month x 2.25 lbs / 1000 gallons x 2000 lbs per ton

3. Monitoring Plan - A twelve (12) month rolling total of emissions shall be maintained to verify compliance with the long-term emission limitation. By the end of the new calendar month, a total shall be calculated for the previous 12 calendar months, and compliance determined and recorded. All calculations and compliance determinations shall be made available for Division review upon request.

#### • Soil Vent – Construction Permit 98WE0015

DCP requested incorporation of permit 98WE0015 into the Operating Permit.

- 1. Applicable Requirements The conditions of construction permit 98WE0015 were incorporated into the Operating Permit. The Title V application identifies this soil vent with air sparge as a soil remediation system Gast model: R6350A-2.
- 2. Emission Factors Compliance factor of 5.84 lb per gallon of condensate removed, determined from site specific sampling. The following equation is used to calculate emissions:

VOC emissions (tons per month) = Volume condensate removed (gallons per month) x Condensate Density (pounds per gallon) x % VOC in Condensate/ 2000 pounds per ton

VOC emissions (tons per month) = Volume condensate removed (gallons per month) x 5.84 pounds per gallon x 17.45% / 2000 pounds per ton

3. Monitoring Plan – A twelve (12) month rolling total of emissions shall be maintained to verify compliance with the long-term emission limitation. By the end of the new calendar month, a total shall be calculated for the previous 12 calendar months, and compliance determined and recorded. All calculations and compliance determinations shall be made available for Division review upon request.

#### • Alternative Operating Scenarios

Since Enterprise will no longer be major with respect to PSD due to the installation of the oxidation catalysts on the four (4) engines present at the facility, DCP requested that permanent engine replacement provisions be added to the engine AOS. The Division finds this request to be appropriate and has incorporated the permanent engine provisions into the Operating Permit.

- The responsible official and contact person was updated as requested by DCP.
- The company name has been changed from Duke Energy Field Services, LP to DCP Midstream, LP.

#### **Other Modifications**

In addition to the modifications requested by the source, the Division has included changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal.

These changes are as follows:

It should be noted that the monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).

Added language specifying that the semi-annual reports and compliance certifications
are due in the Division's office and that postmarks cannot be used for purposes of
determining the timely receipt of such reports/certifications.

#### Section I – General Activities and Summary

- The attainment status of Weld County was updated to reflect the nonattainment status of ozone for this area.
- Conditions 13 and 17 in Condition 1.4 were renumbered to 14 and 18 and Condition 21 in Condition 1.5 was renumbered to 22. The renumbering changes were necessary due to the addition of the Common Provisions requirements in the General Conditions of the permit.
- In Condition 1.4, General Condition 3.g (new general condition for general provisions) was added as a State-only requirement.
- Added "new" condition 5.1 to reflect compliance assurance monitoring (CAM) applicability.
- The language for the alternative operating scenario for temporary and permanent engine replacement was updated to reflect current language.
- Minor language changes were made to Condition 3.1 to more appropriately reflect the status of the source with respect to PSD.
- Added a "new" Section 5 for CAM.
- Summary table 6.1 has been updated.

#### Section II – Specific Permit Terms

#### Section II.1 – P003, P004, P005, P006 – Caterpillar 3300 HP Compressor Engines

- Conditions 1.1 (emission limits & calculation) and 1.3 (fuel limits) were revised to reflect current language and incorporate new limits as result of the installed oxidation catalysts. Also added HAP facility-wide emissions.
- Condition 1.2 Added portable monitoring requirement.

- Condition 1.6 Required source to comply with O&M Plan.
- Condition 1.7 Required source to record operating hours.
- Condition 1.8 Required source to monitor oxidation catalyst.
- Condition 1.9 Added the Control of Emissions from Stationary and Portable engines in the 8-hour Ozone Control (Nonattainment) Area.

Deleted P007 – Superior 12GTA 2000 HP Engine - from permit – Section II.2 due to removal of source from facility.

# Section II.2 – P018 Caterpillar 3550 HP Compressor Engine SN BEK00356 with oxidation catalyst

- Condition 2.1 Added compliance limits.
- Condition 2.2 Added portable monitoring requirements.
- Condition 2.3 Added fuel use limitations.
- Condition 2.4 Added Btu heat content testing.
- Condition 2.5 Added opacity requirement.
- Condition 2.6 Added requirement to follow current operation & maintenance plan.
- Condition 2.7 Added requirements to record operating hours.
- Condition 2.8 Added requirements for oxidation catalyst.
- Condition 2.9 Added requirements of controls on engines in the 8-hour ozone control (Nonattainment) area.
- Condition 2.10 Added CAM Plan condition.
- Condition 2.11 Added requirements for MACT ZZZZ.

#### Section II.3 – Unit D-2 – Lakota Glycol Dehydrator

- Condition 3.1 Updated dehydrator testing requirements.
- Condition 3.3 Added Hours of Operation recordkeeping requirement.
- Condition 3.4 3.8 changed condition numbers (from 3.3 to 3.7).
- Condition 3.9 Added Operation and Maintenance Plan requirement.
- Condition 3.10 Added CAM Plan condition.

 Condition 3.11 – Added Volatile Organic Compound Emissions from Oil and Gas Operations condition.

# <u>Section II.4 - "new" section – Added CAM requirements for engine and dehydrator.</u>

#### Section II.5 – P016 – Condensate Truck Loadout

• Condition 5.1 - Changed compliance limits due to actual throughput changes. Updated language to include monitoring for 12-month rolling total recordkeeping and calculations.

#### Section II.6 – P012 – Fugitive Equipment Leaks

• Condition 6.1 – Added conditions 6.1.1 and 6.1.2 to update fugitive leak testing requirements.

#### Section II.7 - P013 – Stabilized Condensate Tanks – "new" section

- Condition 7.1 Added compliance limits, emission factors, and 12-month rolling total recordkeeping and calculation monitoring requirements.
- Condition 7.2 Added opacity requirement.

#### Section II.8 – SVE-01 – Soil Vent with Air Sparge – "new" section

- Condition 8.1 Added compliance limits, emission factors, and 12-month rolling total recordkeeping and calculation monitoring requirements.
- Condition 8.2 Added opacity requirement.

#### Section II.9, 10

- Updated numbers due to addition of conditions 2, 6, and 7.
- Removed conditions Upset Conditions and Breakdowns, Documents Required, and Reporting.

#### Section III, Condition 3

Added Stream-lined Requirements.

#### Section IV

• Updated General Conditions to version 02/20/2007.

#### Appendix A

• Insignificant Activity list – deleted P013 from list since no longer exempt.

• Updated to 2/2/2007 version.

# Appendix D

• Updated EPA address.

# Appendix G – "new" appendix

• Added Compliance Assurance Monitoring Plan.